

CONCEPT OF IMMUNITY VIS-A-VIS VYADHIKSHAMATWA: A REVIEW**Kadam Krishna Namdeo¹, Jadhav Viraj Vilas²**¹Ph.D. Scholar, Asst. Professor, Department of Roganidan and Vikriti Vigyan,²Associate Professor, Department of Rachna Sharira,

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ABSTRACT

Immunity is a biological term that describes a state of having sufficient biological defences to avoid infection, disease or other unwanted biological invasion. Immunity involves both specific and non-specific components. The nonspecific components act either as barriers or as eliminators of wide range of pathogens irrespective of antigenic specificity. Other components of the immune system adapt themselves to each new disease encountered and are able to generate pathogen specific immunity. This may be correlated to *Vyadhikshamatwa*, resistance to disease or immunity against diseases is of two kinds that is the one which attenuate the manifested diseases and other variety prevents the manifestation of the disease. Factors which contribute for *Vyadhikshamatwa* are normal *dosha*, equilibrium state of *dhatu*, normal *agni*, patency of *strotasa* etc or factors which support the equilibrium state of all physiological parameters. Innate immunity may be correlated to *Sahajabala* or constitutional strength described in *Ayurveda*. Acquired immunity may be correlated to *Kalajabala* or temporal strength and to *Yuktikritabala*. For present article author has collected many references regarding how to enhance immunity and keep the disease body free through principles of *Ayurveda*. In this way author reviewed literature of *Ayurveda* and tried to enlighten the concept of immunity vis-à-vis *Vyadhikshamatwa*.

Keywords: Immunity, *Vyadhikshamatwa*, *ojas*, *sahajabala*, *kalajabala*, *yuktikritabala*

INTRODUCTION

Many kinds of Bacteria, Viruses, Protozoa and many other living entities, which are notorious as origins of many diseases are very enclosed to us. We live with them, we eat with them and we sleep with them. We invite them when we inhale in unhygienic air. They can be intruder through the infected syringes, having sex with infected partner and many more ways are there for the invasion into the body. These pathogenic microorganisms after getting entry into body produce many diseases or contaminations. When a widespread outbreak of an infectious disease comes among human being, many people turn out to be infected at the same time, but some of them remain healthy! Why? That is because of a resistance power against the causes

of illnesses within them or the state of not being susceptible or ill. This is known as Immunity in Modern medicine and *Vyadhikshamatwa* in *Ayurveda*¹.

Resistance to disease or immunity against disease is of two kinds that is the one which attenuate the manifested disease and the other variety prevents the manifestation of disease. During certain conditions or due to certain factors, even unwholesome food does not produce diseases immediately. All unwholesome food articles are not equally harmful, all Doshas are not equally powerful and all persons are not capable of resisting diseases.

Vyadhikshamatwa is defined as the capability of *Sharira* (body) to prevent the *utpatti* of the disease and also to resist almost all types of

organisms, toxins, *nija* and *agantujahetu* that tend to damage the body constitution¹. Unwholesome food substances become more harmful depending upon the nature of locality, time, combination, potency and excessive quantity. For example *Vrihi*, type of corn is unwholesome because it aggravates *Pitta dosha*². It will become more unwholesome if consumed by marshy land people (*Anupdesha*); the same become less harmful, if consumed by people of *Dhanwadesha*². It is more unwholesome during *Sharadaritu* (autumn season) and less harmful in *Hemanta ritu*² (winter season). If it is consumed with curd (*dahi*), penidium (*phanita*), it is more unwholesome and the same become less harmful if consumed with *Madhu*² (honey). If it is consumed in hot state, it become more unwholesome and the same become less harmful if consumed in cold state². If it is consumed in more quantity, it is more unwholesome and become less harmful, when consumed in less quantity². The *Doshas* are exceedingly painful, acute and difficult to cure during their multiple combinations, if they require mutually contradictory therapies, if they are deep seated that is in deeper *dhatu* like *majja* etc². If disease is chronic, it becomes very difficult to cure because they are deep seated and gives displeasure and disease become incurable. If *dashapranayatana* are involved in the disease process along with other vital organs like heart, then disease become difficult to cure. If disease manifest instantaneously, it is an indication that disease become very difficult to cure.

MATERIALS AND METHODS

The article is based on a review of *Ayurvedic* texts. Materials related to concept of *Vyadhikshamatwa* and immunity and other relevant topics have been collected. The main *Ayurvedic* texts used in this study are *Charaka Samhita*, commentary on this and textbook of *Nidanpanchaka* by Dr. Byadgi. For modern concept of immunity, referred textbook of pa-

thology, searched various websites and reports to collect the information on the relevant topics.

Persons, unable to resist the disease²:

- 1) Over-obese individuals;
- 2) Over emaciated persons;
- 3) Whose muscles and blood are diminished markedly;
- 4) Debilitated persons;
- 5) One who consumes unwholesome food;
- 6) One who consumes less amount of food;
- 7) Whose mental faculties are weak

On the other hand individuals having opposite type of physical constitution are capable of resisting diseases.

Contributing factors for *Vyadhikshamatwa*: **Bala or Strength:**

It is the ability of body to defend itself against specific unwanted invading agents. It depends upon the biological defenses of the *Sharira*³. *Bala* or strength is of three types⁴ -

1. **Sahaja or Constitutional bala⁵:**

It is an inherent characteristic property of an individual present since birth. It is because of equilibrium state of *Doshas*.

2. **Kalaja or Temporary bala⁵:**

It depends upon variations in season and age factors. Defence obtained with respect to *ritu* (season) for example *bala* is increased in *Hemanta* and *Shishiraritu*. Neonates are in a state of physiological immunodeficiency. During adolescence, human body undergoes several immunological changes. Loss of strength is observed in *visargakala* and middle age is considered as full of strength.

3. **Yuktikrita bala⁵ or Acquired Strength:**

It is dependant on healthy practices related to diet, activities etc.

Ahara⁵ (Diet): Specific foods like fresh fruits, vegetables and food rich in certain fatty acids may foster healthy immune systems. Fruits like *Amalaki* (*Embllica officinalis*) are rich source of Vitamin-C.

Cheshta⁵ (Activities): Bala is affected by sleep and rest. Sleep deprivation is detrimental to immune function. Performing exercises with proper methods by giving rest in between different exercises.

Yoga⁵: Some considered Yoga as Rasayana therapy. Vajikaranayogas help to acquire strength by fulfilling necessary deficiencies in deficient dhatus.

Medicinal Plants: Some medicinal plants like Amalaki (*Embllica officinalis*), Haritaki (*Terminalia chebula*), Pippali (*Piper nigrum*), Guduchi (*Tinosporacordifolia*), Yashtimadhu (*Glycyrrhizaglabra*) stimulates the immune system.

Sense Organs: Proper utilization of sense organs with their objects, normal actions helps in maintenance of good health.

Compactness: Compactness indicates healthy state of the body. Vata dosha brings about compactness in all tissue elements of the body and promotes union of the body.

Ghee (Ghrita): It is conducive to Rasadhatu, Shukradhatu and Ojas

Sleep^{6,7}: During proper sleep, secretion of hormone maintains the homeostasis at the level of immune system.

Ojas⁸: According to Ayurveda, Ojas is essence present in every dhatu (tissue) and considered as sara of all seven dhatus starting from Rasa to Shukra and responsible for the strength of body. In Ayurveda, Ojas is also known as bala because it provides strength to the body in terms of physical, mental, immunological supportive resistance to the body. There are described two types of Ojas in texts. One is Para Ojas (superior quality) and is situated in Hridaya (heart). It is best and most important. Its quantity is eight drops (ashta bindu⁹). Other type of Ojas is ordinary one and which is dwelling in vessels, attached to heart and its quantity is half anjali⁹. Equilibrium state of Kapha promotes strength that's why normal Kapha is called Ojas. Functions of normal Kapha are like that of Ojas. Normal blood

promotes strength. Wholesome food is the only sole cause for the growth of living being.

The main purpose and objectives of Ayurveda is the preservation of health and healthy individuals and eradication of diseases, which are curable. Person who is having balanced proportion of muscles, compactness, excellent sensory faculties never suffer from diseases. These people can easily withstand hunger, thirst, heat of the sun, cold and physical exercises. Agni performs normal digestion and metabolism activities. Person who is possessing excellence of all dhatus including mental faculties that is sarva sara.¹⁰ Such individuals are endowed with great strength, happiness and resistance to diseases. The individuals with SamaPrakriti perform normal digestion and metabolism activities. These individual possesses equilibrium state of Doshas¹¹.

Promoting factors of Vyadhikshamatwa:

One who consumes wholesome food along with self control, lives longer with proper health for one thousand and thirty six nights that is 100 years and these persons are blessed by noble man¹². Habitual use of ghee and milk causes rejuvenation; amalaki (*Embllica officinalis*) causes rejuvenation; meat of cock is strength promoter; regular consumption of food having all tastes promotes strength; desert land is healthy land; sweet taste, sour taste enhances strength; longevity, health and vital breath are dependent on conditions of agni. When the proper quantity of food and drinks supplied to a person which is commensurate with the power of digestion in the form of fuel, which sustains the agni otherwise leads to abnormal functions. Non violence is the best among the promoters of longevity of living beings; virya (semen) is the best among the promoters of strength; knowledge is the best among promoters of nourishment; self-control is the best for the

promotion of delightfulness; knowledge is the best among promoters of happiness.

Persons free from diseases (having strong Vyadhikshamatwa):

- 1) Consumption of wholesome diet
- 2) Observation of wholesome behaviour
- 3) Unattached to sensual pleasure
- 4) Who donates regularly
- 5) Impartial in judgement
- 6) Always says truth
- 7) Endowed with for forbearing
- 8) Devoted to learned people

Factors required for maintenance of Vyadhikshamatwa:

For the maintenance of equilibrium state of *dhatu*s the essential adaptations are – Proper use of food contrary to the properties of place and time; avoid over utilization, non utilization and improper utilization of time, intellect and sense objects; non suppression of impelled urges and do not indulge in activities which are beyond one’s own capacity. *Dhatu*s grows constantly by the use of the food substances and drinks having similar qualities or dominated by such qualities. Complete uniform growth of the body takes place by following factors. Young age is the period in which complete development of body *dhatu*s observed. Certain unseen factors favours the growth of the body naturally is called *Swabhava Samsiddhi*¹³. Food substances possessing excellent properties and qualities for the over promotion of *dhatu*s are considered ideal food to gain vital immune power. *Avighata*

means absence of factors which favours deterioration of *dhatu*s. For example, excessive indulgence in sexual acts and affliction to mental faculties bring abnormalities in *Doshas*.

The factors, which favour the promotion of strength, are birth of a person in a country where people are naturally strong. For example, *Sindha* region people are strong by nature; time factor which is conducive for *dhatu*s and helps for promotion of strength. For example, if person born during *Hemanta* and *Shishiraritu* which favours the promotion of strength; excellence among qualities of *bija*(sperm) and *kshetra* (ovum and uterus) of parents; excellence of diet; excellence of physique; excellence of suitability; all mental faculties are superior; natural mechanism; young age and exercise and such other physical activities. Habitual performance of exercise promotes strength. Always in cheerful mood is also helpful to gain strength. *Shukra* is the ultimate excellent outcome of food hence it should be preserved because its diminution leads to development of many diseases or even death. Person who is having control over his senses should take wholesome food in proper quantity and in proper time. Otherwise irregular dieting is the root cause for the manifestation of diseases.

The predominant factors which influence the *Vyadhikshamatwa* greatly are –

Table No 1:

<i>Aahar</i>	<i>Kala</i>	<i>Rasayana</i>
<i>Agni</i>	<i>Satmya</i>	<i>Abhisanskar</i> or disease causing factors
<i>Dhatu</i>	Mental status	<i>Vihara</i> (exercise)
<i>Ojas</i>	<i>Dincharya</i>	<i>Anuvanshikata</i>
<i>Dosha</i>	<i>Ritucharya</i>	<i>Ashtaunindita</i>

DISCUSSION

Innate immunity or nonspecific immunity is the natural resistance with which a

person is born. It provides resistance through several physical, chemical and cellular approaches. Microbes first encounter the epithelial layers, physical barriers that line our skin

and mucous membranes. Subsequent general defences include secreted chemical signals that are cytokines, antimicrobial substances, fever and phagocytic activity associated with the inflammatory response. The phagocytes express cell surface receptors that can bind and respond to common molecular patterns expressed on the surface of invading microbes. Through these approaches, innate immunity can prevent the colonization, entry and spread of microbes. This can be correlated to *Sahajabala* – it is an inherent characteristic property of an individual present since birth. It is because of equilibrium state of *Doshas*.

Adaptive immunity is often subdivided into two major types depending on how the immunity was introduced. Naturally acquired immunity occurs through contact with a disease causing agent, when the contact was not deliberate actions such as vaccination. Both naturally and artificially acquired immunity can be further subdivided depending on whether immunity is induced in the host or passively transferred from an immune host. Passive immunity is acquired through transfer of antibodies or activated T-cells from an immune host and is short lived, usually lasting only a few months whereas active immunity is induced in the host by itself by antigen and lasts much longer, sometimes life long¹⁴. This can be correlated to *kalajabala*. And it is dependent on season and age. Loss of strength is observed in *adanakala*, gaining of strength is observed in *visargakala*, middle age is considered as full of strength. *Yuktikrita* – acquired strength is dependent on healthy practices related to diet, activities etc.

Humoral immunity is the aspect of immunity that is mediated by secreted antibodies, whereas the protection provided by cell mediated immunity involves T-lymphocytes alone. Cell mediated immunity is active when the organisms' own T-cells are stimulated and passive when T cells come

from another organism¹⁴. Factors contributing for *Vyadhikshamatwa* are normal *dosha*, equilibrium state of *dhatu*, normal *agni*, patency of *strotasa*¹⁵ etc.

CONCLUSION

From the above review and discussion, it is clear that the concept of *Vyadhikshamatwa* can be correlated with that of immunity. *Sahajabala* may be correlated to innate immunity. *Kalaja* and *Yuktikritabala* may be correlated with acquired immunity. According to *Ayurveda*, immunity depends on *ojas*, equilibrium state of *kapha* and *udana vata*. Diseases of immune system arise due to disturbance in *ojas*, *kapha*, *bala* and *udana vata* etc. Failure of host defence does occur, however and fall into three broad categories; immunodeficiency's (*Ojokshaya*), autoimmunity (*Ojovisramsya*) and hypersensitivities (*Ojovyapat*)¹⁶.

Factors responsible for influencing and maintaining strength of body has been already discussed in *Ayurvedic Samhita Granthas* back 1000 years ago. Therefore the need of the day is to enlighten the basic concepts in *Ayurveda* with the help of modern science, tools and techniques. It will be definitely helpful to increase awareness and consciousness among the general public to keep body and mind free from disease.

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